

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

ATTORNEY DOCKET NO. CONFIRMATION NO. FIRST NAMED INVENTOR FILING DATE APPLICATION NO. 7547 9988.077.00-US 10/717,931 11/21/2003 Jong Ho Kim 08/22/2007 30827 7590 **EXAMINER** MCKENNA LONG & ALDRIDGE LLP RIGGLEMAN, JASON PAUL 1900 K STREET, NW WASHINGTON, DC 20006 PAPER NUMBER ART UNIT 1746 MAIL DATE **DELIVERY MODE** 08/22/2007 **PAPER** 

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Auntication No.	Applicant(a)
Office Action Summary	Application No.	Applicant(s)
	10/717,931	KIM ET AL.
	Examiner	Art Unit
	Jason P. Riggleman	1746
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
1) Responsive to communication(s) filed on 20 March 2007.		
2a) ☐ This action is <b>FINAL</b> . 2b) ☐ This action is non-final.		
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is		
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4) Claim(s) 1,2 and 4-7 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) is/are allowed.  6) Claim(s) 1-2, 4-7 is/are rejected.  7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/or election requirement.		
Application Papers		
<ul> <li>9) The specification is objected to by the Examiner.</li> <li>10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.</li> <li>Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).</li> <li>Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).</li> </ul>		
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>		
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	Paper No(s	Summary (PTO-413) s)/Mail Date nformal Patent Application 

Application/Control Number: 10/717,931 Page 2

Art Unit: 1746

### **DETAILED ACTION**

#### Status of Claims

1. Applicant's reply filed on 3/20/2007 is acknowledged. Current pending claims are 1-2 and 4-7. Claims 1 and 4 amended. Claim 3 is cancelled.

#### Remarks

2. In regards to claim 1, a "wash cycle" has been assumed to be – a non-laundry amount-sensing agitation of the wet laundry.

## Claim Rejections - 35 USC § 102

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1 and 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by "Daewoo" (KR Patent Publication No. P1996-0023421).
- 4. Daewoo teaches a method for controlling a washing machine. The washing machine has a means for determining an open state or a closed state of a door of the washing machine. A first wet laundry amount is sensed after initiating a wash cycle of a wash course. A second wet laundry amount is sensed upon detection of an open state of the door (during a predetermined time period following initiation of the wash cycle during the wash cycle). The wash course is controlled based on the first wet laundry amount if the open state of the door is not detected during the predetermined time period (if door is not opened during wash cycle). The wash course is controlled based on the second wet laundry amount if the open state of the door is detected during the predetermined time period (duration of wash cycle). The wash cycle is reset if the detection of an open state of the door, during the wash cycle, occurs during the wash

Application/Control Number: 10/717,931 Page 3

Art Unit: 1746

cycle before a predetermined point (end of) wash cycle. The wash cycle is divided into three predetermined time periods – sense load + wash (reset); open door – second wet load sensing; wash control.

### Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over "Daewoo" (KR Patent Publication No. P1996-0023421) as applied to claim 1 above, and further in view of Harwood et al. (US Patent No. 5768728).
- 7. Daewoo does not teach sensing a dry laundry amount before initiating the wash cycle; however, Harwood et al. teaches determining the load of laundry prior to admitting the water (Column 2, Lines 59-65). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Daewoo with Harwood et at to create a washing machine which fills the tub with the amount of water appropriate (based on initial load size) for the dry laundry amount to achieve the expected result.
- 8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over "Daewoo" (KR Patent Publication No. P1996-0023421) as applied to claim 1 above, and further in view of Toru (JP Patent Publication No. 06-039183).
- 9. Daewoo does not teach sensing a wet laundry periodically throughout the wash cycle; however, Toru teaches sensing the quantity of laundry at certain respectively

Art Unit: 1746

specified intervals. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Daewoo with Toru to create a washing machine which fills the washer according to the most recent load amount to achieve the expected efficient result.

### Response to Amendment

10. Applicant's amendments filed on 3/20/2007 is acknowledged. In view of the amendments, the 112 second paragraph rejections of the claims; drawing objections; and specification objections are withdrawn. Applicant's arguments with respect to claims 1-2 and 4-7 have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 . CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Application/Control Number: 10/717,931

Art Unit: 1746

Page 5

than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jason P. Riggleman whose telephone number is 571-

the advisory action. In no event, however, will the statutory period for reply expire later

272-5935. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Michael Barr can be reached on 571-272-1414. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jason P Riggleman

Examiner

Art Unit 1746

**JPR** 

MICHAEL BARR SUPERVISORY PATENT EXAMINER